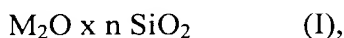


### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Previously Presented): A dried hydrogel, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture;

admixing the polymerization reaction mixture, before, during or after the polymerization and before drying, with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

postcrosslinking a resulting polymer in which said silicate is evenly distributed; thereby obtaining a hydrogel containing said postcrosslinked polymer; and drying said hydrogel at an elevated temperature, to obtain said dried hydrogel; wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said polymer;

wherein said polymer is prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 20% by weight, reckoned on SiO<sub>2</sub> and based on a total monomer weight.

Claim 2 (Canceled):

Claim 3 (Canceled):

Claim 4 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal silicate and an alkali metal hydroxide, to thereby neutralize said polymer contained in said hydrogel.

Claim 5 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by admixing said hydrogel after said polymerization with a mixture of an alkali metal silicate and an alkali metal carbonate, to thereby neutralize said polymer contained in said hydrogel.

Claim 6 (Previously Presented): The dried hydrogel as claimed in claim 1, prepared by neutralizing said polymer contained in said hydrogel to a pH of from 3.5 to 9.0.

Claim 7 (Previously Presented): The dried hydrogel as claimed in claim 1, wherein a drying temperature is in the range from 40°C to 300°C.

Claims 8-9. (Cancelled)

Claim 10 (Previously Presented): A process for preparing dried hydrogel particles, comprising:

polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture, to obtain a solid gel containing a polymer;

admixing the polymerization reaction mixture before or during the polymerization or admixing said solid gel with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

thereby obtaining particles of a gel in which said silicate is evenly distributed; postcrosslinking said particles of the gel; and

drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles;

wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said particles of the gel;

wherein said polymer is prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 20% by weight, reckoned on  $SiO_2$  and based on a total monomer weight.

Claim 11 (Previously Presented): A method for absorbing aqueous solutions, dispersions and emulsions, comprising:

contacting the dried hydrogel according to claim 1 with an aqueous solution, dispersion or emulsion.

Claim 12 (Previously Presented): An article, comprising:

the dried hydrogel according to Claim 1;

said article being capable of absorbing an aqueous fluid.

Claim 13 (Previously Presented): The dried hydrogel according to claim 1 which is capable of absorbing an aqueous fluid.

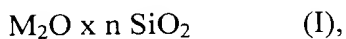
Claim 14 (Previously Presented): The dried hydrogel according to claim 1, wherein said olefinically unsaturated carboxylic acid is selected from the group consisting of acrylic acid, methacrylic acid, crotonic acid, 2-acryl-amido-2-methylpropanesulfonic acid, 2-acryl-amido-2-methylpropanephosphonic acid, vinylphosphonic acid and mixtures thereof.

Claim 15. (Canceled)

Claim 16 (Previously Presented): The dried hydrogel according to claim 1, wherein M in formula (I) is sodium.

Claim 17 (Previously Presented): The dried hydrogel according to claim 1, wherein M in formula (I) is potassium.

Claim 18 (Previously Presented): Dried hydrogel particles, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salt in a polymerization reaction mixture, to obtain a solid gel containing a polymer; admixing said solid gel with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

thereby obtaining particles of a gel in which said silicate is evenly distributed;  
postcrosslinking said particles of the gel;  
drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles;

wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said particles of the gel;

wherein said polymer is prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 20% by weight, reckoned on  $\text{SiO}_2$  and based on a total monomer weight.

Claim 19. (Canceled)

Claim 20 (Previously Presented): The dried hydrogel according to claim 1, wherein said polymer is water-insoluble.

Claim 21 (Previously Presented): The dried hydrogel according to claim 1, wherein said polymer is a copolymer.

22. (Canceled)

Claim 23 (Previously Presented): The dried hydrogel according to claim 1, wherein said alkali metal silicate is soluble in water.

Claim 24 (Previously Presented): The dried hydrogel according to claim 1, wherein said alkali metal silicate is admixed with said polymerization reaction mixture after the polymerization and before drying.

Claim 25 (Previously Presented): A dried hydrogel, prepared by polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture;

admixing the polymerization reaction mixture, before or during the polymerization and before drying, with an alkali metal silicate of the general formula I



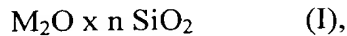
wherein M is an alkali metal and n is from 0.5 to 4;  
postcrosslinking a resulting polymer in which said silicate is evenly distributed;  
thereby obtaining a hydrogel containing said postcrosslinked polymer; and  
drying said hydrogel at an elevated temperature, to obtain said dried hydrogel;  
wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said polymer;

wherein said polymer is prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 20% by weight, reckoned on SiO<sub>2</sub> and based on a total monomer weight.

Claim 26 (Previously Presented): A process for preparing dried hydrogel particles, comprising:

polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture, to obtain a solid gel containing a polymer;

admixing the polymerization reaction mixture before or during the polymerization with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

thereby obtaining particles of a gel in which said silicate is evenly distributed;

postcrosslinking said particles of the gel; and

drying said particles of the gel at an elevated temperature, to obtain said dried hydrogel particles;

wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said particles of the gel;

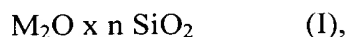
wherein said polymer is prepared by admixing said alkali metal silicate in an amount of from 0.05% by weight to 20% by weight, reckoned on SiO<sub>2</sub> and based on a total monomer weight.

Claim 27 (New) A process for preparing dried hydrogel particles, each particle comprising a water-insoluble carboxylate polymer which comprises a polysilicate matrix and being capable of a swelling and absorbing an aqueous fluid and retaining the absorbed fluid under a certain pressure;

said process comprising

polymerizing an olefinically unsaturated carboxylic acid or its salts in a polymerization reaction mixture;

admixing the polymerization reaction mixture, before, during or after the polymerization and before drying, with an alkali metal silicate of the general formula I



wherein M is an alkali metal and n is from 0.5 to 4;

postcrosslinking a resulting polymer in which said silicate is evenly distributed; thereby obtaining a hydrogel containing said postcrosslinked polymer; and drying said hydrogel at an elevated temperature, to obtain said dried hydrogel; wherein said postcrosslinking is effected by a crosslinker which is a compound containing two or more groups that form covalent bonds with the carboxyl groups of said polymer.

Claim 28 (New): The process as claimed in claim 27, wherein said polymerization is performed in a homogeneous phase.

Claim 29 (New): The process as claimed in claim 27, wherein said admixing of the polymerization reaction mixture with an alkali metal silicate of the general formula I is before the polymerization and before drying.

Claim 30 (New): The process as claimed in claim 27, wherein said admixing of the polymerization reaction mixture with an alkali metal silicate of the general formula I is during the polymerization and before drying.



Claim 31 (New): The process as claimed in claim 27, wherein said admixing of the polymerization reaction mixture with an alkali metal silicate of the general formula I is after the polymerization and before drying.

Claim 32 (New): The process as claimed in claim 27, which does not contain zeolite.

Claim 33 (New): The process as claimed in claim 27, wherein said postcrosslinking is effected using a crosslinker selected from the group consisting of polyglycidyl ethers, haloepoxy compounds, polyols, polyamines, polyisocyanates, polyfunctional aziridine compounds, alkyl di(tri)halides and oil-soluble polyepoxy compounds.

Claim 34 (New): The process as claimed in claim 27, wherein surface crosslinking treatment of the polymer is effected using from 0.1 to 5% by weight of alkylene carbonate.

Claim 35 (New): The process as claimed in claim 27, wherein the alkali metal silicate of the formula I is in the form of an aqueous solution.

Claim 36 (New): The process as claimed in claim 27, wherein said olefinically unsaturated carboxylic acid is acrylic acid, methacrylic acid, crotonic acid, 2-acrylamido-2-methylpropanesulfonic acid, 2-acrylamido-2-

methylpropanephosphonic acid, vinylphosphonic acid, vinylphosphonic monoesters, acrylamide, N-vinylamides or mixtures thereof.

Claim 37 (New): The process as claimed in claim 27, wherein said polymer is neutralized with a mixture of an alkali metal silicate and an alkali metal hydroxide in the form of an aqueous solution, after the polymerization.

Claim 38 (New): The process as claimed in claim 27, wherein said polymer is neutralized with a mixture of an alkali metal silicate and an alkali metal carbonate.

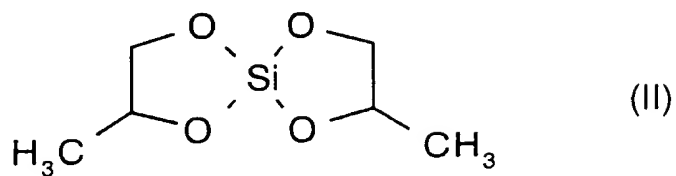
Claim 39 (New): The process as claimed in claim 27, wherein said polymer is neutralized to a pH in the range from 3.5 to 9.0.

Claim 40 (New): The process as claimed in claim 27, wherein said polymer is neutralized to a pH in the range from 4.0-6.5.

Claim 41 (New): The process as claimed in claim 27, wherein, at a polymer pH of from 5.0 to 9.0, the gel permeability is at least  $25 \times 10^{-7} \text{ cm}^3 \text{ sec/g}$ , and

wherein at a polymer pH of less than 5.0, the gel permeability is in particular at least  $4 \times 10^{-7} \text{ cm}^3 \text{ sec/g}$ .

Claim 42 (New): The process as claimed in claim 27, wherein said postcrosslinking is performed with mono-, bis- and polyoxazolidinones, or with the cyclic ester of propanediol with silicic acid of the formula II



or with di-, tri- or polyepoxides, haloepoxy compounds, polyamine compounds or polyhydric alcohols.

Claim 43 (New): The process as claimed in claim 27, wherein the polymer is dried before postcrosslinking.